## THE RESURGENCE OF COSMIC STORYTELLERS

## by Brian Swimme

Brian Swimme's insights about the Story of the Universe look to the unifying impact of a "cosmic story" that speaks to all cultures and nations. Swimme suggests that humans are now able, through science and narrative, to present a story which will make us all a "cohesive tribe" while answering the universal questions of developing humans, such as "Where does everything come from?" "What makes things die?" and "What is my place in the universe?" Swimme's work is aligned with Thomas Berry's, and both have been influenced by Montessori's book To Educate the Human Potential.

We find ourselves in a world with 50,000 nuclear warheads, with ecocide underway on every continent, with massive starvation and torture and cruelty. How do we get out of this? How do we make our way into health and vitality? My proposal is that we tell stories. In particular, we must tell the many stories that make up the *great cosmic story*. This storytelling activity may be the most important political and economic act of our time.

I understand how superficial such a remark might seem. Stories are told to children to put them to sleep. Stories are what we put on TV to help us forget our harried day at the office. Stories are make-believe, whereas the *Wall Street Journal* is what the world is really about. But there is a different and deeper story, one we rarely encounter in our mechanistic, patriarchal, materialistic, consumeroriented culture.

A cosmic creation story answers the questions asked by children. Where does everything come from? Why do things die? Children want to understand their place in the universe. They wonder about their roles. They have an inherent need for a cosmic story.

There are many creation stories; they have been told around evening fires for most of the last 50,000 years. These cosmic stories were the way humans chose to initiate their children into understanding the universe and their place in this world. The rituals, the traditions, the taboos, the ethics, the techniques, the customs, and the values all had as their core a cosmic story. The story provided a central cohesion

for each society, a "world-interpretation," a likely account of the development and nature of things in this world. "Story" is the fundamental answer we give when we are asked what really matters in this world.

Why a story? Why should a story be fundamental? I don't know why. But I have come to agree with those who regard it as the fundamental unit of intelligibility for advanced hominid intelligence. We can certainly note its pervasive presence. Margaret Mead once remarked that she had never come across a primal people who lacked a cosmic story. Humans will have their cosmic stories as surely as they will have their food and drink. My own position is that the universe, at its most basic level, is not only matter, energy, and information. The universe is story. Each creature is a story. Each human enters this world and awakens to a simple truth: "I must find my own story within this great epic of being."

What about the present? Do we still tell stories? We most certainly do, even if we do not call them stories. I remember the history texts we used in grade school and high school. I learned that history began with impoverished primitives, continued with the technical inventions of the scientific period, and culminated—not openly, but there was never any doubt—in the United States of America, with its luxuriant natural resources, its political freedom, its superior modes of production. For proof, there were the graphs of industrial production comparing the United States with other countries, all indicating that we were the peak of this long line of development.

Throughout my educational experiences, I was told stories that evoked an emotional bonding with this society, so that it was only natural I would want to support, defend, and extend this society's values and accomplishments. Of course none of this was considered story; we were learning the *facts* of the matter. Obviously, the people of China or India or Turkey or Brazil, reflecting on their educational process, would recall a different story.

Though all civilizations and cultures told themselves stories, none of the industrial countries taught cosmic stories. They focused entirely on the human world. The universe and the Earth were only backdrops. The oceans were large, the species many, but these immensities were just sets on the human stage. All our disasters today are directly related to the fact that these cultures ignored the cosmos to focus on the human. Our use of land, our use of technology, our uses of each other are flawed in a million ways, but all are fundamentally due to the same mistake made at the start of things. We have failed because we were never initiated into nature's sacred activities. We have failed because we have no cosmic story.

How could this have happened? How could modern Western culture have escaped a 50,000-year-old tradition of telling cosmic stories? The stories of the tribes and the ancient religions were thrown out for the superior knowledge that the sciences provided. Why tell the story of the Sun as a god when we knew the sun was a locus of thermonuclear reactions? We attached ourselves to scientific law and relegated story and myth to the nurseries, tribes, and asylums.

What a shock it has been to have *story* reappear, and this time right in the very center of the mathematical sciences. Someday someone will tell the story of how *story* forced its way into the most anti-story domain of modern science—mathematical physics.

For physicists, during this modern age, "reality" has meant the fundamental interactions of the universe. In a sense, the contemporary physicist has regarded the world's essence as captured by the right group of mathematical equations. The second law of thermodynamics or the strong nuclear interaction are the real forces in the universe. Reality's quintessence is seen to be these underlying dynamics, these deep structures of the physical universe. Though our focus is on physics, this orientation has

held for the Western intellectual tradition overall. We can see this with linguists who focus attention on the deep structure of a language, or with the cultural anthropologists who attend to the underlying structures of tribal myths and customs.

In each case the "surface" details are of secondary importance, for they are simply particular ways in which the deeper structure manifests itself. The denigration of details comes from the conviction that once we know the deep structure—the mathematical equations, the linguistic/cerebral patterns—we simultaneously control the surface manifestations, for the surface is determined by the underlying dynamics.

For most physicists, then, the universe has been seen as an explication of the underlying physical laws. Time and the story of Time were regarded as secondary, even illusory. Time was simply a parameter that appeared in the equations; there was nothing special about this time today as opposed to some time a billion years from now. The equations remained the same.

The best story I know concerning the dismissal of time concerns Albert Einstein. Out of his own amazing genius, he arrived at his famous field equations, the mathematical laws governing the universe in its physical macrodimensions. What most alarmed Einstein—and we must remember that here was a man who had the courage to stick to his mathematical insights no matter how shocking they might seem to the world—what most disturbed Einstein about his own equations was their implication that the universe was expanding. Such a notion made no sense in Einstein's static worldview, which held that the universe today is essentially the same as the universe at any other time.

To avoid these alarming implications, Einstein altered his equations to eliminate their prediction of an expanding universe. And only when Edwin Hubble later showed him the empirical evidence that the universe was indeed expanding did Einstein realize his failure of nerve. He later came to regard his doctoring of the field equations as the fundamental blunder of his scientific career. Following on the work of Einstein and Hubble and others, we realize now that this is not a static universe; we live in a universe that had a beginning and has been developing over 15 billion years. That is, we now realize that we live in a story.



Courtesy of Montessori High School at University Circle, Cleveland, Ohio

Story forced its way still further into physics when, in recent decades, scientists discovered that even the fundamental interactions of the universe have *evolved* into their present form. The laws that govern the physical universe today and that were thought to be immutable are themselves the results of developments over time. The cosmic story, rather than being governed by underlying laws, draws these laws into itself.

Story asserts itself still further into the consciousness of contemporary physicists when the very nature of physical law is thrown into question. Where once we listed a set of laws we were certain held everywhere and at all times, we now discover violations of each of these laws. A preeminent physicist of our time, J. A. Wheeler, concludes that in nature "there is no law except the law that there is no law."

It is important to understand the connection between this weakening of our belief in a "physical law" and the emerging value given to the cosmic story. Precisely because we lose confidence in ever nailing nature down do we simultaneously come to respect her infinite and astonishing creativity.

The story of the three centuries of modern science is similar to the story of a young male who has had astonishing success with capturing the affection and favor of young females. Though gifted, he is also young. He brags to his buddies that he has things under control and begins to take the female world for granted, lost in the arrogance that he knows women. Finally he meets a female who breaks beyond his carefully constructed theories, who refuses to allow him to reduce her to his formulas. Shattered, he enters a deepened awe at the very nature and mystery of what he has been taking for granted. And



Courtesy of Montessori de la Condesa, Mexico City, Mexico

suddenly every detail of every encounter becomes an invitation into astonishment and delight.

Only when we are surprised in the presence of a person or a thing are we truly in love. And no matter how intimate we become, our surprise continues. Without question we come to know the beloved better and are able to speak central truths about her or him or it; but never do we arrive at a statement that is the final word. There are always further surprises, for to be in love is to be in awe of the infinite depths of things.

The central desire of scientists in the future will be to explore and celebrate an ever-deepening intimacy with the story of the universe, of the galaxies, of the planet Earth, of the life forms, of the human journey. I am suggesting that the theories will be seen not simply as objective laws but as central articulations that evoke an enhanced intimacy with the nature of things. The value of the strong nuclear interaction as objectively true will be deepened by our awareness that study and contemplation of the

strong nuclear interaction evokes a rich intimate presence of stars.

Of course, these are my speculations. I may be wrong. Instead of scientists devoting themselves to a further exploration and celebration of the cosmic story, they may be entirely captured by the militaries of the planet. But I don't think so, and for a number of reasons. Two reasons have to do with the planetary implications of the cosmic creation story. Einstein's resistance underlines one of the most significant facts of the cosmic creation story: its power of persuasion. Einstein did not want to discover a universe that began in time. Another famous physicist, Arthur Eddington, found the whole notion "abhorrent." But the story is convincing. It has the potency to offset and even to displace every previous worldview. This displacing of traditional stories has often resulted in a cultural tragedy, a fact that needs to be understood. What I want to bring to our attention here is that the contemporary human being finds the cosmic story undeniably tied to the truth, and this is great news indeed.

For suddenly the human species as a whole has a common cosmic story. Islamic people, Dineh people, Christian people, Marxist people, Hindu people can all agree in a basic sense on the birth of the sun, on the development of the Earth, on the complex history of human cultures. For the first time in human existence, we have a cosmic story that is not tied to a cultural tradition or to a political ideology but that gathers every human group into its meanings. Certainly we must not be naive about this claim of universality. Every statement of the cosmic story will be placed in its own cultural context, each, to varying degrees, expressive of political, religious, and racial perspectives. But even so, we have broken through to a story that is panhuman, a story that is already taught and developed on every continent and within every major cultural setting.

What does this mean? Every tribal person knows the central value of the tribe's cosmic story in uniting the people. We are now creating the common story that will enable *Homo sapiens* to become a cohesive tribe. Instead of structuring American society on its own human story and Chinese society on its own human story and so on, we have the opportunity to tell the cosmic story, the mammalian story, the ocean story. Instead of building our lives and our society's meaning around the various human stories

alone, we can build our lives and societies around the Earth story.

This is a good place to make my final comment on the meaning of the *cosmic creation story*. For though I refer in general to the account of our emergence out of the fireball and into galaxies and stars and Earth's life, I also think of the cosmic story as something that has not yet emerged. I think we will only have a common story for the human community when poets tell us the story. For until artists, poets, mystics, and nature lovers tell the story, we have only facts and theories.

Most tribal communities understand the necessity of developing storytellers—people who spend their lives learning the cosmic story and celebrating it in poetry, chant, dance, painting, and music. The life of the tribe is woven around such celebrations. The telling of the story is understood as that which both initiates the young and regenerates the universe. The ritual of telling the story is understood as a cosmic event. For unless the story is sung and danced, the universe suffers from decay and fatigue. Everything depends on telling the story—the health of the people, the health of the soil, the health of the sun, the health of the soul, the health of the sky.

We need to keep the tribal perspective in mind when we examine our situation in the modern period. Instead of poets, we have had one-eyed scientists and theologians. Neither of these high priests nor any of the rest of us has been capable of celebrating the cosmic story. It is no wonder, then, that all of us are sick and disabled, that the soils have gone bad, that the sky is covered with soot, that the waters are filled with evil. Because we had no celebrations inaugurating us into the universe, the whole world has become diseased.

But what will happen when the storytellers emerge? What will happen when "the primal mind", to use Jamake Highwater's phrase, sings of our common origin, our stupendous journey, our immense good fortune? We will become real members of the earth community. We will have evoked out of the depths of the human psyche those qualities enabling our transformation from disease to health. We must encourage cosmic storytellers because our dominant culture is blind to their value. Isn't it remarkable that we can obtain several hundred books on how to get a divorce, how to invest money, how to lose

fat, and yet there is nothing available to assist those destined to sing about the great epic of being?

I suggest that when the artists of the cosmic story arrive, our monoindustrial assault will end and the new beginnings of the Earth will be ignited. Our situation is similar to that of the early Christians. They had nothing—nothing but a profound revelatory experience. They did nothing—nothing but wander about telling a new story. And yet the Western world entered a transformation from which it has never recovered.

So too with our moment. We have nothing to compare with the massive accumulation of hate and fear and arrogance that the ICBMs and the Third World debt and the chemical toxins represent. But we are in the midst of a revelatory experience of the universe that must be compared in its magnitude with those of the great religious revelations. And we need only wander about telling this new story to ignite a transformation of humanity. For this story has the power to undo the mighty and the arrogant and to ignite the creativity of the oppressed and forgotten. As the Great Journey of the universe breaks in human self-awareness, nothing can dam up our desire to shake off the suffocation of nationalism and anthropocentricism and to plunge instead into adventures of the cosmos.

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Let me end with an imaginary event—a moment in the future when children are taught by a cosmic storyteller. We can imagine a small group gathered around a fire in a hillside meadow. The woman in the middle is the oldest, a grandmother to some of the children present. If we can imagine such an event today, we can be assured that tomorrow someone will begin the journey of bringing such dreams into reality.

The old woman might begin by picking up a chunk of granite. "At one time, at the beginning of the Earth, the whole planet was a boiling sea of molten rock. We revere rocks because everything has come from them—not just the continents and the mountains, but the trees and the oceans and your bodies. The rocks are your grandmother and your grandfather. When you remember all those who have helped you in this life, you begin with the rocks, for if not for them, you would not be." She holds the rock before them in silence, showing each person in turn. "Do you hear the rock sing-

ing? In the last era, people thought there was no music in rocks. But we know that is not true. After all, some rocks became Mozart and revealed their music through Mozart."

Now she slowly sinks her hands into the ground and holds the rich, loamy soil before her. "Every rock is a symphony, but the music of soil soars beyond capture in human language. We had to go into outer space to realize how rare and unique soil is. Only the Earth created soil. There is no soil on the moon. There are minerals on the moon, but no soil. There is no soil on Mars. There is no soil on Venus, or on the Sun, or on Jupiter, or anywhere else in the surrounding trillion miles. Even the Earth, the most extraordinary creative being of the solar system, required four billion years to create soil. We worship and nurture and protect the soils of the Earth because all music and all life and all happiness comes from the soil. The soils are the matrix of human joy."

She points now to a low-hanging star in the great bowl of the night sky. "Right now that star is at work creating the elements that will one day live as sentient beings. All the matter of the Earth was created by the Grandmother Star that preceded our sun. She fashioned the carbon and nitrogen and all the elements that would later become all the bodies and things on Earth. And when she was done with her immense creativity, she exploded in celebration of her achievement, sharing her riches with the universe and enabling our birth.

"Her destiny is your destiny. In the center of your being you too will create, and you too will shower the world with your creativity. Your lives will be filled with both suffering and joy; you too will often be faced with death and hardship. But all of this finds its meaning in your participation in the great life of Earth. It is because of your creativity that the cosmic journey deepens."

She stares into the distance. In the long silence, she hears the thundering breakers on the ocean shore, just visible in the evening's light. They listen as the vast tonnage of saltwater is lifted up in silence, then again pounds up the sand. "Think of how tired we were when we arrived here, and all we had to do was carry our little bodies up the hills! Now think of the work that is being done ceaselessly as all the oceans of the world curl into breakers against the shores. And think of all the work that is done

ceaselessly as the Earth is pulled around the sun. Think of all the work that is done ceaselessly as all the hundred billion stars of the Milky Way are pulled around the center of the galaxy.

"And yet the stars don't think of this as work. Nor do the oceans think of their ceaseless tides as work. They are drawn irresistibly into their activities, moment after moment. The Earth finds itself drawn irresistibly to the sun, and would find any other path in life utterly intolerable. What amazing work the stars and the planets accomplish, and never do we hear them complain!

"We humans and we animals are no different at all. For we find ourselves just as irresistibly drawn to follow certain paths in life. And if we pursue these paths, our lives—even should they become filled with suffering and hardship—are filled with the quality of effortlessness. Once we respond to our deepest allurements in the universe, we find ourselves carried away, we find ourselves on the edge of a wave passing through the cosmos that had its beginning fifteen billion years ago in the fiery explosion of the beginning of time. The great joy of the human being is to enter this allurement that pervades everything, and to empower others—including the soil and the grasses and all the forgotten—so that they might enter their own path into their deepest allurement."

The light of the dusk has gone. She sits with the children in the deepening silence of the dark. The fire has died down to become a series of glowing points, mirroring the ocean of starlight above them. "You will be tempted at times to abandon your dreams, to settle for cynicism or greed, so great will your anxieties and fears appear to you. But no matter what, remember that our universe is a universe of surprise. We put our confidence not in our human egos but in that power that gathered the stars and knit the first living cells together. Remember that you are here through the creativity of others. You have awakened in a great epic of being, a drama that is fifteen billion years in the making. The intelligence that ignited the first minds, the care that spaced the notes of the nightingale, the power that heaved all hundred billion galaxies across the sky now awakens you too and permeates your life no less thoroughly.

"We do not know what mystery awaits us in the very next moment. But we can be sure we will be astonished and enchanted. This entire universe



Courtesy of Brad Bachulis

sprang into existence from a single numinous speck. Our origin is mystery, our destiny is intimate communion with all that is, and our common species aim is to celebrate the Great Joy that has drawn us into itself."

Rocks, soils, waves, stars—as they tell their story in ten thousand languages and two thousand

cultures, they bind us to them in our emotions and our spirits and our minds and our bodies. It is the Earth who speaks in all this. It is the Earth who tells her story. It is the Earth who persuades us to switch our allegiance from the partial to the whole. It is the Earth who carries out the transformation from terror to a celebration of life, and her only power is the magnificence of her story.

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